

The Second International Conference  
Psychology and Music – Interdisciplinary Encounters  
(PAM-IE Belgrade 2022)

Main Conference Program, October 26–29, 2022

Parallel Conference Program, October 27, 2022

Main Organizer

Faculty of Music, University of Arts in Belgrade

Co-organizers

Institute of Psychology, Faculty of Philosophy, University of Belgrade

Psychology of Music Section, Serbian Psychological Society

Regional Network Psychology and Music (RNPaM)

**How to cite this volume**

Bogunović, B., Nikolić, S., & Mutavdžin, D. (Eds.). (2023). *Proceedings of the PAM-IE Belgrade 2022*. Faculty of Music, University of Arts in Belgrade.

Proceedings of the Second International Conference  
Psychology and Music – Interdisciplinary Encounters, Belgrade 2022

*Editors*

Blanka Bogunović, Sanela Nikolić, and Dejana Mutavdžin

*Publisher*

Faculty of Music, University of Arts in Belgrade, Kralja Milana 50, Belgrade

*For publisher*

Faculty of Music  
Ljiljana Nestorovska

*Editor-in-Chief of the Faculty of Music Publications*

Gordana Karan

*Cover design*

Stefan Ignjatović

*Technical Editor and Pre-Press*

Dušan Ćasić

ISBN-978-86-81340-59-2

PAM-IE Belgrade 2022 Conference and this publication were supported by  
the Ministry of Science, Technological Development and Innovation of the Republic of Serbia.

THE SECOND INTERNATIONAL CONFERENCE

Psychology and Music –  
Interdisciplinary Encounters

**PROCEEDINGS**

Editors

Blanka Bogunović, Sanela Nikolić, and Dejana Mutavdžin



Faculty of Music, University of Arts in Belgrade, 2023



# Mental Health and Resilience in Classical Musicians during COVID-19 Pandemic in the Republic of North Macedonia

Dimitrinka Jordanova Peshevska<sup>1</sup>, Ana Tomovska-Misoska<sup>1</sup>, Kate Trajkova<sup>1</sup>,  
and Tamara Mitanovska<sup>2</sup>

<sup>1</sup> *University American College Skopje, Skopje, Republic of North Macedonia*

<sup>2</sup> *Nevrovita, Centre for Neuropsychology, Diagnostic and Counselling, Skopje, Republic of North Macedonia*

<sup>1</sup>jordanovap@uacs.edu.mk, <sup>1</sup>tomovska@uacs.edu.mk, <sup>1</sup>kate.trajkova@uacs.edu.mk, <sup>2</sup>tamara90mk@yahoo.com

## Abstract

The COVID-19 pandemic, as a major public health threat, significantly influenced the mental health and well-being of music professionals, including classical/orchestral musicians around the globe and as well in North Macedonia. Some studies highlighted the high degree of occupational stress, while others displayed relatively high prevalence rates of distress, both among classical/orchestral musicians (39%) and musical students (69%) during the COVID-19 pandemic, compared to previous studies (before COVID-19) where the prevalence of mental health problems among this professional group was reported from 20% to 33% in some studies. This study aimed to explore the link between mental health (anxiety and stress) and resilience among classical/orchestral musicians during the COVID-19 pandemic, and investigate the predictive role of resilience on their mental health. The cross-sectional study includes 49 classical/orchestral musicians and students in North Macedonia (63% male and 37% female), using a convenient snowball sample recruitment strategy by online data collection form from March–April 2022. Several self-reported measurements were used in the study: Depression Anxiety Stress Scale (DASS-21) short version; Resilience coping 4 items scale (Brief Resilient Coping Scale), and general resilience was measured by 9 items scale. The study results show a statistically significant link between general resilience and both, anxiety, and stress. The multiple regression analysis shows that the increase in general resilience is a predictor of lower anxiety ( $\beta = -.489, p < .001$ ) and lower levels of stress ( $\beta = -.538, p < .001$ ). Resilience coping was not found to be a significant predictor for mental health in this study. The study informs about the predictors for stress and anxiety and helps facilitate mental health intervention for classical/orchestral musician and students that will significantly enhance their resilience and well-being.

## Introduction

In December 2019, a local outbreak of acute respiratory syndrome with unknown etiology in Wuhan, China, later identified as COVID-19, quickly spread to other regions in China and other parts of the world. In March 2020, the World Health Organization (WHO) declared a global pandemic of COVID-19 (WHO, 2020). WHO and the Centre for Disease Control and Prevention (CDC) have recommended particular health behaviors to decrease infectious diseases. Later, the government's measures included social isolation and lockdown that influenced the everyday life of people and work performance in particular workforce groups. Classical and orchestral musicians were among the most affected workforce groups, suffering harmful mental health consequences (WHO, 2020, 2021).

Music profession is very demanding, requiring possession of various skills and capacities besides musical one, to strive in the challenging musical scene. They need to adapt to teamwork, shift work, traveling, various locations, and changing time zones, leave their families for some periods, live at close residences with colleagues, and cope with financial insecurity (Sternbach, 1995).

The mental health challenges in classical/orchestral musicians have been described in many studies even before the COVID-19 pandemic spread. Some studies highlighted the high degree of occupational stress (Iñesta et al., 2008; Kenny & Ackermann, 2009). Most musicians require a long period of intense training and practice to accomplish the skills to perform

musically at a high level, with an estimated minimum of 10,000 hours of thoughtful rehearsal and a usual length of 16 years of regular training (Kenny & Ackermann, 2016). Anxiety has been identified as one of the mental health problems in classical/orchestral musicians. It can be in the form of performance anxiety due to public speaking, test-taking, or music performance. The most common form of anxiety is generalized anxiety disorder, which appears to co-occur in about 1/3 of those presenting with severe performance anxiety (American Psychiatric Association, 2013; Spahn, 2015). Others may experience social phobia (social anxiety) if the performer demonstrates significant loss in interactions with others as well as in the performance setting (American Psychiatric Association, 2013). Around 10–15% of musicians suffering from social phobia have a comorbidity of depression (Kessler et al., 1999), and also a higher prevalence of mental distress among opera and orchestral musicians compared to the general population.

Several studies have analyzed the mental health in classical and orchestral musicians and students during the COVID-19 pandemic. One study conducted among Brazilian musicians showed a 13% prevalence of moderate or severe levels of general anxiety, a 19% prevalence of social anxiety, and a 20% prevalence of depression (Medeiros Barbar et al., 2014). Ackermann et al. (2014), in a cross-sectional survey of professional orchestral musicians ( $N = 377$ ), found that performance anxiety and social anxiety are more prevalent in female and youngest musicians. They also found that about 1/3 of musicians reported social phobia, 32% were found depressive, and 22% reported post-traumatic stress disorder (PTSD) among the participants (Ackermann et al., 2014). Besides the evidence gathered on the high prevalence of mental health problems in musicians before the COVID-19, there is limited evidence on the mental health of classical/orchestral musicians during the COVID-19 pandemic.

Spiro et al. (2021) conducted a cross-sectional study on 385 performing arts professionals using the HEartS Professional Survey

during the COVID-19 lockdown in the United Kingdom. Over 2/3 of the participants ( $N = 260$ , 68%) were from music or sound arts; the other percentage was from other performing arts (acting, dancing, and musical theater). The study results found that over half the participants reported moderate levels of well-being (55%), over a third reported 'prosperous' (34%), and only 11% were 'deteriorating' in their well-being. Sixty nine percent reported three or more depressive symptoms and hence could be described as depressed (Spiro et al., 2021).

In the same study, age was positively associated with well-being and social connectedness and negatively with depression and loneliness. Multiple regression analyses indicate that perceived financial hardship was associated with lower well-being and higher depression and loneliness. Older age was positively associated with higher scores on well-being and social connectedness scores and decreased depression and loneliness. Gender appeared as a statistically significant variable related to depression: male participants had reported lower depression scores compared to women (Spiro et al., 2021).

Another prospective cohort study was conducted by Stubbe et al. (2021), aiming to investigate the effect of COVID-19 preventive measures on the mental health of performing arts students. The participants included all first-, second-, and third-year performing arts students ( $N = 213$ ) of the Bachelors in Dance, Dance and Education, Circus Arts, and Music from Codarts Rotterdam, University of the Arts, in the period September 2019–May 2020. On a monthly basis students were asked to complete a questionnaire including items on mental health complaints, stress, and sleep quality. In the final analysis, a total of 98 students (46.0%) were included. The results show that the 3-month prevalence of mental health complaints was significantly higher during the COVID-19 lockdown compared to the 2 pre-COVID-19 periods ( $p < .001$ ). Mean stress was significantly lower for February (35.20) and March (36.41) compared to the overall mean (40.38). Sleep quality was significantly higher for April (6.90), and May (6.89) when com-

pared to the overall mean (6.58). Additionally, about 75.5% of the participants dealt with moderate to severe loneliness in all 3 months during the COVID-19 lockdown. The prevalence of mental health complaints enlarged (Stubbe et al., 2021).

Certain studies have shown that resilience can serve as a protective factor for mental health. The concept has been defined in various ways depending on the theoretical and methodological stance of the authors. For example, Rutter (1987) has defined resilience as “protective factors which modify, ameliorate or alter a person’s response to some environmental hazard that predisposes to a maladaptive outcome” (p. 316), while Masten (2014) has a wider concept of resilience “as the capacity of a dynamic system to adapt successfully to disturbances that threaten system function, viability, or development” (p. 6). Luthar et al. (2000a, p. 543) look at the concept of resilience as “a dynamic process encompassing positive adaptation within the context of significant adversity”.

Despite various definitions of resiliency, or resilience, the two common components of this psychological construct, contained in all definitions are: 1) the exposure of adverse experiences and 2) the positive adjustment outcomes of that adversity (Luther et al., 2000b).

Kegelaers et al. (2021) conducted a cross-sectional study in The Netherlands, examining the association between mental health distress (depression/anxiety) and resilience among classical musicians. The sample included a total of 64 respondents (17.44% response rate), with 36 music students and 28 music professionals, male (46.9%) and female musicians (51.6%) were nearly equal. The results show that 51.6% of participants scored above the cut-off score of the GHQ-12, indicating symptoms of depression/anxiety. Musical students had a prevalence rate of 61.1%, while the prevalence rate for musicians-professionals was 39.3%. In the study, female musicians had a higher prevalence rate of 57.6%, compared to male musicians with 44.8%. The results indicated that the differences in depression/anxiety for both professional status and gender were significant, with female

musicians reporting higher prevalence rates on mental health scales. A strong negative association was found between resilience and depression/anxiety. Furthermore, resilience seems to be a protective factor against these mental health issues (Kegelaers et al., 2021).

Bartos et al. (2021) implemented the quasi-experimental study, exploring the potential benefits of the CRAFT program at the University of Granada, Spain. The CRAFT program was specifically developed for holistic education that influences students’ emotional, cognitive, and physical processes and assists their learning experience, happiness, health, and well-being based on mindfulness, yoga, positive psychology, and emotional intelligence (Posadas, 2019). The participants included in the study were two groups of students, one group of students enrolled in CRAFT-based elective subjects formed the CRAFT intervention group ( $n = 40$ ), and the other group of students represented the control group ( $n = 53$ ). The students participating in the study needed to complete at least 2 hours per week to implement the activities at home. Their results present a significantly higher proportion of proactive participants in the CRAFT program group, 92% more than in the control group (58%) in terms of implementing practices to improve their health and well-being during the lockdown. Additionally, significantly more participants acknowledged perceived benefits from their practices in the CRAFT program group, 78% more than in the control group, with 52%. The research suggests that previous exposure to mindfulness and yoga implementing practices have been valuable in improving their health and well-being during the lockdown (Bartos et al., 2021).

## Aims

The aim of this study was to explore the link between mental health (anxiety and stress) and resilience among classical/orchestral musicians in North Macedonia during the COVID-19 pandemic, and to investigate the predictive role of resilience on their mental health.

## Method

### Participants

The cross-sectional study includes 49 classical/orchestral musicians and students in North Macedonia (63% male and 37% female), using a convenient snowball sample recruitment strategy by online data collection form from March–April 2022. Their mean age was 35.54, with a minimum of 21 years and a maximum of 61 years.

**Table 1. Demographic data of the sample.**

	Percentage of respondents
<b>Gender</b>	
Male	60.4
Female	39.6
<b>Education</b>	
High school	10.2
Bachelor degree	57.1
Master degree	32.7
<b>Length of employment</b>	
Less than 1 year	10.2
1–5 years	32.7
6 to 10 years	10.2
11 to 20 years	28.6
21 years and above	18.4

Table 1 displays the demographic profile of the sample. Most of the respondents were male, and most had Bachelor's degrees. The sample was almost evenly split between those who have below 10 years of work experience and those with more than 10 years' of work experience. Regarding the type of job position 62.5% play musical instruments (violin, piano, flute, guitar); 22.5% are musical pedagogues; 7.5% are solo singers; 5% are conductors, and 2.5% composers.

### Measurement

Several self-reported measurements were used in the study. The Depression Anxiety Stress Scale (DASS) developed by Lovibond and Lovibond (1995), or DASS-21 short version,

was used for determining stress and anxiety. Within the DASS Scale, anxiety was measured by a 7-item subscale, and stress was composed of 7-item subscale, both measured on a 4-point Likert-type scale. Participants were asked to assess every item on a scale ranging from 0 (*did not apply to me at all*) to 3 (*applied to me very much*) in the last week. For example, for anxiety, they were asked how much they agree with the statement “I experienced breathing difficulty (e.g., excessively rapid breathing, breathlessness in the absence of physical exertion)” and for stress, for example, they were asked: “I felt that I was using a lot of nervous energy”. Cronbach's alphas were relatively high for both subscales: for anxiety, Cronbach's alpha is .87, and for stress, Cronbach's alpha is .90.

Resilience coping 4 items scale (BRCS – Brief Resilient Coping Scale), developed by Sinclair et al. (2004), was used in measuring how to cope with stress in a highly adaptive manner, showing relatively high internal consistency (Cronbach's alpha is .83). The variable resilience was measured by 9 items scale taken from Connor et al. (2003) with questions related to the appraisal of dealing with stress, change, failure, and negative feelings. Cronbach's alpha for the Resilience scale is also very high .90.

Additionally, 5 items were included for measuring optimal planning related to job performance (Cronbach's alpha is .87). Change in work experienced during the pandemic was measured by 1 item (“How much has pandemic changed your work”), ranging from 1 – *no change* to 10 – *major change*, while difficulties in work experienced during the pandemic were measured by 1 item (“How much has the pandemic made your work harder”), ranging from 1 – *no change* to 10 – *a very big change* in work experienced.

## Results

To begin with the analysis, descriptive scrutiny was performed. The results are provided in Table 2.



**Table 2. Descriptive statistics.**

Variables	N	Min	Max	M	SD
<b>Creative Coping</b>	49	1.25	5.00	3.92	0.85
<b>Anxiety</b>	49	.00	2.14	0.58	0.60
<b>Stress</b>	49	.00	3.00	.81	0.73
<b>Resilience</b>	49	2.30	5.00	3.95	0.65
<b>Optimal Planning</b>	49	1.40	5.00	3.78	0.82

The first step of the analysis was conducted using a correlation matrix (Appendix 1). The results show statistically significant positive correlations between stress and anxiety ( $r = .81, p < .01$ ), resilience and creative coping ( $r = .53, p < .01$ ), creative coping and the change in work experienced during the pandemic ( $r = .48, p < .01$ ), and creative coping and optimal planning ( $r = .34, p < .05$ ). There was also a negative correlation between resilience and anxiety ( $r = -.49, p < .01$ ), and resilience and stress ( $r = -.54, p < .01$ ).

Two multiple regression analyses have been conducted to explore the link between the protective factors and both anxiety and stress.

The first one had anxiety as an outcome variable and age, gender (as a dummy variable), resilience, creative coping, and work experience (as a dummy variable) as predictors. The model was statistically significant ( $F = 3.18, p = .02$ ) and explained 19,1% of the overall variance in the outcome variable (Adjusted  $R^2 = .19$ ). The analysis results are shown in Table 3. As can be seen, only resilience is a statistically significant predictor of anxiety, and the link is negative ( $\beta = -.54, p < .01$ ). This means that higher scores in resilience are linked with lower reported anxiety levels.

**Table 3. Regression analysis for the variable anxiety.**

	Unstand. Coef.		Stand. Coef.	t	p
	B	SE B	$\beta$		
<b>(Constant)</b>	2.34	0.76		3.06	.004
<b>Age</b>	.001	0.01	.02	.10	.92
<b>Gender</b>	-.22	0.17	-.18	-1.30	.20
<b>Resilience</b>	-.50	0.15	-.54	-3.42	.001
<b>Creative Coping</b>	.08	0.19	.12	.70	.49
<b>Above/below 10 years of work experience</b>	.00	.23	.00	-.001	.099

**Table 4. Regression analysis for the variable stress.**

	Unstand. Coef.		Stand. Coef.	t	p
	B	SE B	$\beta$		
<b>(Constant)</b>	2.98	.878		3.40	.002
<b>Age</b>	.002	.014	.02	.12	.91
<b>Gender</b>	-.08	.197	-.06	-.43	.67
<b>Resilience</b>	-.75	.169	-.67	-4.45	.000
<b>Creative Coping</b>	.23	.136	.26	1.68	.10
<b>Above/below 10 years in work experience</b>	-.20	.268	-.14	-.75	.45

The second model with stress as an outcome variable was statistically significant ( $F(47) = 4.41, p = .003$ ), and it explains 27% of the variance (Adjusted  $R^2 = .27$ ). The results are displayed in Table 4. As can be seen, again, only resilience is a statistically significant predictor negatively linked to stress ( $\beta = -.667, p < .01$ ).

The results show that resilience can act as a protective factor when it comes to both stress and anxiety.

## Discussion

The results of the study conducted on a sample of classical/orchestral musicians demonstrate a statistically significant protective role of resilience for the prevalence of stress and anxiety among classical/orchestral musicians, regardless of the gender, age of the respondents, and length of their work experience. The findings are in line with Kegelaers et al. (2021) argument that resilience might serve as a protective factor against these mental health issues.

Significant support for the finding can be found in a number of studies (Miller & Chandler, 2002; Nrugham et al., 2012; Shapero et al., 2019; Wells et al., 2012) that show a negative correlation of resilience with depression and anxiety in a period before the pandemic. Anyan and Hjemdal (2016) indicated that resilience partially mediated the relationship between stress, symptoms of anxiety, and depression.

The findings of several previous studies (Kegelaers et al., 2021; Spiro et al., 2021) display relatively high prevalence rates of mental health distress, both among classical/orchestral musicians (39%) and musical students (69%) during the COVID-19 pandemic, compared to previous studies (before COVID-19) where prevalence among this professional group was reported from 20% to 33% in various studies (Ackermann et al., 2014; Medeiros Barbar et al., 2014). This is consistent with the current research, both in musicians (Ackermann et al., 2014) and in other professions as well, such as the healthcare workforce (Jordanova Peshevska et al., 2021; Sahin et al., 2020; Sheraton et al., 2020; Tomovska Misovska et al., 2021).

Based on the reported positive relationship between resilience and positive indicators of mental health, it is obvious that the creative coping with uncertainty during the pandemic among the respondents contributes to strengthening the protective effect of resilience in rela-

tion to anxiety and stress. According to many empirical studies, resilience is negatively correlated with indicators of mental health problems, such as depression, anxiety, and negative emotions, and positively correlated with positive indicators of mental health, such as life satisfaction, subjective well-being, and positive emotions (Hu et al., 2015)

The importance of age, and the association between being younger and having worse outcomes, was also confirmed in the review both in musical professionals and students (Kegelaers et al., 2021; Spiro et al., 2021). In the case of our study, age, gender, and years of experience were not significantly correlated with mental health outcomes. Hence, these findings extend the perspectives in earlier studies and encompass an understanding of the relationship between resilience and mental health status among this professional group.

Further research is required to understand the factors related to age, gender, and mental and social well-being outcomes and their work in these new settings. Another aspect that needs to be further addressed is the association between creative coping and the change in work experienced during the pandemic as well as between creative coping and optimal planning and how they contribute to the role of resilience when it comes to both stress and anxiety.

## Conclusion

This paper investigated the relationship between mental health (anxiety and stress) and resilience among classical/orchestral musicians in North Macedonia during the COVID-19 pandemic and the predictive role of resilience on their mental health. The results provided a snapshot of the protective role of resilience for the prevalence of stress and anxiety among classical/orchestral musicians, regardless of gender, age of respondents, and length of work experience. These observations contribute to a broader perspective of understanding the relationship between resilience and mental health status in this occupational group. Based on the results, future theoretical and applied work should fur-

ther explore other aspects of the mental health of classical musicians and students on a larger sample as well as to explore in which way resilience has a protective role in classical musicians. The preliminary finding also highlights the importance of implementing evidence-based intervention programs that can build resilience and can serve as a protective factor for classical musicians and students.

## References

- Ackermann, B. J., Kenny, D. T., O'Brien, I., & Driscoll, T. R. (2014). Sound Practice: Improving occupational health and safety for professional orchestral musicians in Australia. *Frontiers in Psychology*, 5, Article 973. <https://doi.org/10.3389/fpsyg.2014.00973>
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorder* (5<sup>th</sup> ed.). <https://doi.org/10.1176/appi.books.9780890425787>
- Anyan, F., & Hjemdal, O. (2016). Adolescent stress and symptoms of anxiety and depression: Resilience explains and differentiates the relationships. *Journal of Affective Disorders*, 203, 213–220. <https://doi.org/10.1016/j.jad.2016.05.031>
- Bartos, L. J., Funes, M. J., Ouellet, M., Posadas, M. P., & Krägeloh, C. (2021). Developing resilience during the COVID-19 pandemic: Yoga and mindfulness for the well-being of student musicians in Spain. *Frontiers in Psychology*, 12, Article 642992. <https://doi.org/10.3389/fpsyg.2021.642992>
- Connor, K. M., & Davidson, J. R. T. (2003). Development of a new resilience scale: The Connor-Davidson Resilience Scale (CD-RISC). *Depression and Anxiety*, 18(2), 76–82. <https://doi.org/10.1002/da.10113>
- Íñesta, C., Terrados, N., García, D., & Pérez, J. A. (2008). Heart rate in professional musicians. *Journal of Occupational Medicine and Toxicology*, 3(1), Article 16. <https://occup-med.biomedcentral.com/articles/10.1186/1745-6673-3-16>
- Hu, T., Zhang, D., & Wang, J. (2015). A meta-analysis of the trait resilience and mental health. *Personality and Individual Differences*, 76, 18–27. <https://doi.org/10.1016/j.paid.2014.11.039>
- Jordanova-Peshevska, D., Tomovska-Misovska, A., Trajkova, K. (2021). Job performance and mental health in workforce in North Macedonia during Covid-19 pandemic. In *Post pandemic sustainability in Europe, September 16, 2021, Skopje, R.N. Macedonia* (pp. 146–156). University American College Skopje Publisher.
- Kegelaers, J., Schuijjer, M., & Oudejans, R. R. D. (2021). Resilience and mental health issues in classical musicians: A preliminary study. *Psychology of Music*, 49(5), 1273–1284. <https://doi.org/10.1177/0305735620927789>
- Kenny, D. T., & Ackermann, B. (2009). Optimizing physical and psychological health in performing musicians. In S. Hallam, I. Cross, & M. Thaut (Eds.), *The Oxford handbook of music psychology* (pp. 390–400). Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780198722946.001.0001>
- Kenny, D. T., & Ackermann, B. J. (2016). Hitting the high notes: Healthy aging in professional orchestral musicians. In A.-S., Antoniou, R. J. Burke, C. L. Cooper (Eds.), *The aging workforce handbook: Individual, organizational and societal challenges* (pp. 633–650). Emerald Group Publishing Limited. <https://doi.org/10.1108/9781786354471>
- Kessler, R. C., Stang, P., Wittchen, H.-U., Stein, M., & Walters, E. E. (1999). Lifetime co-morbidities between social phobia and mood disorders in the US National Comorbidity survey. *Psychological Medicine*, 29(3), 555–567. <https://doi.org/10.1017/S0033291799008375>
- Lovibond, P. F., & Lovibond, S. H. (1995). The structure of negative emotional states: Comparison of the Depression Anxiety Stress Scales (DASS) with the Beck Depression and Anxiety Inventories. *Behaviour Research and Therapy*, 33(3), 335–343. [https://doi.org/10.1016/0005-7967\(94\)00075-u](https://doi.org/10.1016/0005-7967(94)00075-u)
- Luthar, S. S., Cicchetti, D., & Becker, B. (2000a). The construct of resilience: A critical evaluation and guidelines for future work. *Child Development*, 71(3), 543–562. <https://doi.org/10.1111%2F1467-8624.00164>
- Luthar, S. S., Cicchetti, D., & Becker, B. (2000b). Research on resilience: Response to commentaries. *Child Development*, 71(3), 573–575. <https://doi.org/10.1111/1467-8624.00168>
- Masten, A. S. (2014). Global perspectives on resilience in children and youth. *Child Development*, 85(1), 6–20. <https://doi.org/10.1111/cdev.12205>
- Medeiros Barbar, A. E., de Souza Crippa, J. A., & de Lima Osório, F. (2014). Performance anxiety in Brazilian musicians: Prevalence and association with psychopathology indicators. *Journal of Affective Disorders*, 152–154, 381–386. <https://doi.org/10.1016/j.jad.2013.09.041>

- Miller, A. M., & Chandler, P. J. (2002). Acculturation, resilience, and depression in midlife women from the former Soviet Union. *Nursing Research, 51*(1), 26–32. <https://doi.org/10.1097/00006199-200201000-00005>
- Nrugham, L., Holen, A., & Sund, A. M. (2012). Suicide attempters and repeaters: Depression and coping: A prospective study of early adolescents followed up as young adults. *The Journal of Nervous and Mental Disease, 200*(3), 197–203. <https://doi.org/10.1097/nmd.0b013e318247c914>
- Posadas, P. (2019). *Programa CRAFT: Mindfulness, inteligencia emocional, psicología positiva y yoga en Educación* [CRAFT Program: Mindfulness, emotional intelligence, positive psychology, and yoga in education]. Educatori.
- Rutter, M. (1987). Psychosocial resilience and protective mechanisms. *American Journal of Orthopsychiatry, 57*(3), 316–331. <https://psycnet.apa.org/doiLanding%3Fdoi%3D10.1111%252Fj.1939-0025.1987.tb03541.x>
- Şahin, M. K., Aker, S., Şahin, G., & Karabekiroğlu, A. (2020). Prevalence of depression, anxiety, distress and insomnia and related factors in healthcare workers during COVID-19 pandemic in Turkey. *Journal of Community Health, 45*(6), 1168–1177. <https://doi.org/10.1007/s10900-020-00921-w>
- Shapero, B. G., Farabaugh, A., Terechina, O., De-Cross, S., Cheung, J. C., Fava, M., & Holt, D. J. (2019). Understanding the effects of emotional reactivity on depression and suicidal thoughts and behaviors: Moderating effects of childhood adversity and resilience. *Journal of Affective Disorders, 245*, 419–427. <https://doi.org/10.1016/j.jad.2018.11.033>
- Sheraton, M., Deo, N., Dutt, T., Surani, S., Hall-Flavin, D., & Kashyap, R. (2020). Psychological effects of the COVID 19 pandemic on healthcare workers globally: A systematic review. *Psychiatry Research, 292*, Article 113360. <https://doi.org/10.1016/j.psychres.2020.113360>
- Sinclair, R. (2004). Participation in practice: Making it meaningful, effective and sustainable. *Children & Society, 18*(2), 106–118. <https://doi.org/10.1002/chi.817>
- Spahn, C. (2015). Treatment and prevention of music performance anxiety. *Progress in Brain Research, 217*, 129–140. <https://doi.org/10.1016/bs.pbr.2014.11.024>
- Spiro, N., Perkins, R., Kaye, S., Tymoszyk, U., Mason-Bertrand, A., Cossette, I., Glasser, S., & Williamon, A. (2021). The effects of COVID-19 lockdown 1.0 on working patterns, income, and well-being among performing arts professionals in the United Kingdom (April–June 2020). *Frontiers in Psychology, 11*, Article 594086. <https://doi.org/10.3389%2Ffpsyg.2020.594086>
- Sternbach, D. J. (1995). Musicians: A neglected working population in crisis. In S. L. Sauter & L. R. Murphy (Eds.), *Organizational risk factors for job stress* (pp. 283–302). American Psychological Association. <https://psycnet.apa.org/doi/10.1037/10173-018>
- Stubbe, J. H., Tiemens, A., Keizer-Hulsebosch, S. C., Steemers, S., van Winden, D., Buiten, M., Richardson, A., & van Rijn, R. M. (2021). Prevalence of mental health complaints among performing arts students is associated with COVID-19 preventive measures. *Frontiers in Psychology, 12*, Article 676587. <https://doi.org/10.3389/fpsyg.2021.676587>
- Tomovska-Misovska, A., Jordanova-Peshevska, D., & Trajkova, K. (2021). Predicting effects of organizational commitment and changed working conditions on employees' task performance during Covid-19 pandemic. In Ž. Živković (Ed.), *IMC-SM 2021 Proceedings* (Vol. 12[1]; pp. 239–250). University of Belgrade, Technical Faculty in Bor; Department of Engineering Management. [http://media.sjm06.com/2021/10/Proceedings\\_IMC-SM21\\_Issue-1.pdf](http://media.sjm06.com/2021/10/Proceedings_IMC-SM21_Issue-1.pdf)
- Wells, M., Avers, D., & Brooks, G. (2012). Resilience, physical performance measures, and self-perceived physical and mental health in older Catholic nuns. *Journal of Geriatric Physical Therapy, 35*(3), 126–131. <https://doi.org/10.1519/jpt.0b013e318237103f>
- World Health Organization. (2021). *WHO Coronavirus disease (COVID-19) dashboard*. <https://covid19.who.int/>
- World Health Organization. (2021). *COVID19 Strategic Preparedness and Response Plan: Monitoring and Evaluation Framework, 11 May 2021* (No. WHO/WHE/2021.07). World Health Organization.

Appendix 1. Correlations between the study variables.

	Age	Gender	Education	Length of Employment	Creative Coping	Anxiety	Stress	Change in Meeting People	Resilience	Change of work in Pandemic	Pandemic make your work harder	Optimal Planning
Age	—											
Gender	-.10	—										
Education	.29*	.21	—									
Length of Employment	.82**	.05	.37**	—								
Creative Coping	-.15	.24	.20	-.08	—							
Anxiety	-.05	.21	.10	-.01	-.14	—						
Stress	.04	.13	.14	.12	-.10	.81**	—					
Change in Meeting People	-.20	-.04	-.07	-.05	.08	-.27	-.17	—				
Resilience	.05	-.03	.16	.05	.53**	-.49**	-.54**	.11	—			
Change of work in Pandemic	-.09	.29*	-.09	-.12	.48**	.07	.07	-.02	.37**	—		
Pandemic make your work harder	-.03	-.02	-.03	.03	-.08	-.06	-.04	.18	-.12	.01	—	
Optimal Planning	-.19	.10	.12	-.23	.34*	.13	-.11	.167	.26	.06	-.02	—

\*  $p < .05$ . \*\*  $p < .01$ .